

REMARKS

Applicants thank the Examiner for his comments, which have helped Applicants in responding to the Office Action. Claims 1-36 are pending in the present application.

5 Claims 15 and 18 have been amended to provide further clarification. No new matter has been entered. A complete listing of the Claims is provided herein.

OBJECTION TO THE DRAWINGS

10 The drawings were objected to because in Figure 4d the Examiner understood "CTU 40" to be "CPU 40." Figure 4d has been amended to address the Examiner's objection. In Figure 4d, block 40 has been relabeled to read "CPU" instead of "CTU." Applicants respectfully request withdrawal of the objection to the drawings.

15 OBJECTIONS TO THE SPECIFICATION

The specification was objected to because of informalities. The specification has been amended to address the Examiner's objections. Applicants believe that the replacement paragraphs submitted herewith overcome the objections to the specification. Applicants 20 respectfully request withdrawal of the objections to the specification.

CLAIM REJECTIONS – 35 USC 103

Claims 1-21 and 23-30 were rejected under 35 USC 103(a) as being unpatentable over 25 U.S. Patent No. 6,163,795 to Kikinis (hereinafter "Kikinis") in view of U.S. Patent No. 6,122,400 to Reitmeier (hereinafter "Reitmeier"). Applicants respectfully submit that Kikinis and Reitmeier, taken alone or in combination, fail to teach, suggest, or render obvious the present invention as claimed.

30 Independent Claim 1 recites a method of delivering video content through a residential broadband network, comprising, *inter alia*, within the second processor,
"joining the spatially compressed frame of video content with the temporally compressed frame of video content to create a data stream of compressed video content;

35 outputting the data stream of compressed video content to the remote client."

Independent Claim 15, as amended, recites a method of delivering motion video or audio content through a broadband network, comprising, *inter alia*, within the first processor, “rendering a frame of video that contains a display window with coordinates,” and within the 5 second processor, “outputting the data stream of previously compressed motion video or audio content to the remote client for display within the coordinates of the display window.”

Independent Claim 18, as amended, recites a processing engine for the delivery of video content through a broadband network, comprising, *inter alia*,

10 “a second processor, that is under program control to, temporally compress the spatially compressed frame of the video content to form a plurality of temporally compressed frames representing the video content, and merge the spatially compressed frame of the video content and the plurality of the temporally compressed frames of the video content to render a stream of compressed frames 15 representing the video content and to output the stream to the remote client.”

The Office Action states that Kikinis and Reitmeier, taken alone or in combination, teach each and every limitation of the present invention as claimed. Applicants respectfully disagree for the following reasons.

20 Kikinis teaches a video jukebox service and system for delivering locally accessed video to client stations on demand, which includes a plurality of client stations used by a client and adapted to receive and play digital video entities, and a plurality of file server stations for storing video data and for providing the video to clients. As stated in the Office Action, at 25 page 3, Kikinis fails to teach or suggest the spatially and temporally compressed frames produced by two processors.

In particular, Kikinis fails to teach or suggest a method of delivering video content through a residential broadband network, comprising, *inter alia*, within the second processor,

30 “joining the spatially compressed frame of video content with the temporally compressed frame of video content to create a data stream of compressed video content; outputting the data stream of compressed video content to the remote client;”

as claimed in independent Claim 1. Kikinis further fails to teach or suggest a method of 35 delivering motion video or audio content through a broadband network, comprising, *inter*

alia, within the first processor, “rendering a frame of video that contains a display window with coordinates,” and within the second processor, “outputting the data stream of previously compressed motion video or audio content to the remote client for display within the coordinates of the display window, ” as claimed in independent Claim 15. Finally,

5 Kikinis fails to teach or suggest a processing engine for the delivery of video content through a broadband network, comprising, *inter alia*,

“a second processor, that is under program control to, temporally compress the spatially compressed frame of the video content to form a plurality of temporally compressed frames representing the video content, and merge the spatially compressed frame of the video content and the plurality of the temporally compressed frames of the video content to render a stream of compressed frames representing the video content and to output the stream to the remote client,”

as claimed in independent Claim 18.

15 Reitmeier does not remedy any of the deficiencies of Kikinis. Reitmeier teaches a method and apparatus for dynamically controlling the coding rate of a block based video coding system in response to colormetric information within the video signal.

20 Reitmeier fails to teach or suggest a method of delivering video content through a residential broadband network, comprising, *inter alia*, within the second processor,

“joining the spatially compressed frame of video content with the temporally compressed frame of video content to create a data stream of compressed video content;

outputting the data stream of compressed video content to the remote client,”

25 as claimed in independent Claim 1. Reitmeier further fails to teach or suggest a method of delivering motion video or audio content through a broadband network, comprising, *inter alia*, within the first processor, “rendering a frame of video that contains a display window with coordinates,” and within the second processor, “outputting the data stream of previously compressed motion video or audio content to the remote client for display within the coordinates of the display window, ” as claimed in independent Claim 15. Finally,

30 Reitmeier fails to teach or suggest a processing engine for the delivery of video content through a broadband network, comprising, *inter alia*,

“a second processor, that is under program control to, temporally compress the spatially compressed frame of the video content to form a plurality of temporally compressed frames representing the video content, and merge the spatially

compressed frame of the video content and the plurality of the temporally compressed frames of the video content to render a stream of compressed frames representing the video content and to output the stream to the remote client,” as claimed in independent Claim 18.

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At most, Reitmeier discloses spatial coding of residual or input macroblocks using a DCT component 112 and a quantizer 114 to produce the output block at port 104. See col. 3, lines 52-56. The motion vector predictor 126 generates motion vectors that are used in generating predicted macroblocks. See col. 4, lines 45-48. The subtractor 16 subtracts on 10 path 107 the predicted macroblocks from the input macroblocks to obtain the residual macroblocks, which are subsequently fed into the DCT. See col. 3, lines 18-26.

Furthermore, Kikinis fails to teach or suggest a combination with Reitmeier, and Reitmeier fails to teach or suggest a combination with Kikinis. Moreover, even assuming arguably that 15 such a combination is possible, the combination would still fail to teach or suggest a method of delivering video content through a residential broadband network, comprising, *inter alia*, within the second processor,

“joining the spatially compressed frame of video content with the temporally compressed frame of video content to create a data stream of compressed video 20 content;

outputting the data stream of compressed video content to the remote client,”

as claimed in independent Claim 1. The combination further fails to teach or suggest a method of delivering motion video or audio content through a broadband network, comprising, *inter alia*, within the first processor, “rendering a frame of video that contains a 25 display window with coordinates,” and within the second processor, “outputting the data stream of previously compressed motion video or audio content to the remote client for display within the coordinates of the display window,” as claimed in independent Claim 15. Finally, the combination fails to teach or suggest a processing engine for the delivery of video content through a broadband network, comprising, *inter alia*,

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“a second processor, that is under program control to, temporally compress the spatially compressed frame of the video content to form a plurality of temporally compressed frames representing the video content, and merge the spatially compressed frame of the video content and the plurality of the temporally compressed frames of the video content to render a stream of compressed frames 35 representing the video content and to output the stream to the remote client,”

as claimed in independent Claim 18.

Thus, Applicants respectfully submit that Claims 1, 15, and 18 are not obvious over Kikinis and Reitmeier, taken alone or in combination, and should be allowed. Claims 2-14, 16, 17,

5 19-21, and 23-30, dependent directly or indirectly from independent Claims 1, 15, and 18, respectively, are also not obvious over Kikinis and Reitmeier, taken alone or in combination, and should also be allowed at least for the same reasons as stated above. As a result, Applicants respectfully request withdrawal of the rejections and allowance of the Claims.

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ALLOWABLE SUBJECT MATTER

Applicants thank the Examiner for the allowance of Claims 31-36.

Claim 22 was objected to as being dependent upon a rejected base claim, but would be

15 allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 22 depends indirectly from allowable Claim 18 and should be allowed at least for the same reasons as stated above. As a result, Applicants respectfully request withdrawal of the objection and allowance of the Claim.

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CONCLUSION

Based on the foregoing, Applicants consider the claimed invention to be distinguished from the art of record. Accordingly, Applicant earnestly solicits the Examiner's withdrawal of the rejections raised in the above referenced Office Action, such that a Notice of Allowance is
25 forwarded to Applicant, and the present application is therefore allowed to issue as a United States Patent.

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Respectfully Submitted,



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